

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A data processing apparatus, comprising:

an input portion;

an output portion;

a plurality of compressing/expanding devices ~~which~~ that compress data-to-be-  
~~output~~ ~~outputted~~ that is inputted from said input portion and expand compressed  
data-to-be-~~output~~ ~~outputted~~;

a file memory which stores said compressed data-to-be-~~output~~ ~~outputted~~, the  
data-to-be output being compressed by some or all of said plurality of  
compressing/expanding devices;

a data discrimination portion which discriminates whether said input data-to-  
be-~~output~~ ~~outputted~~ ~~inputted from said input portion~~ is data including a small amount  
of information or a large amount of information; and

a transfer controller,

wherein, in cases where it is discriminated by said data discrimination portion  
that said data-to-be-~~output~~ ~~outputted~~ is data including a small amount of information,  
said transfer controller transfers said data-to-be-~~output~~ ~~outputted~~ to said output  
portion through less than all of said plurality of compressing/expanding devices  
operating in parallel, and

wherein, in cases where it is discriminated by said data discrimination portion that said data-to-be-output ~~outputted~~ is data including a large amount of information, said transfer controller transfers said data-to-be-output ~~outputted~~ to at least some ~~some or all~~ of said plurality of compressing/expanding devices while transferring said data-to-be-outputted to said output portion.

2. (Currently Amended) The data processing apparatus as recited in claim 1, further comprising a compressing/expanding controller,

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, said compressing/expanding controller assigns some of said plurality of compressing/expanding devices to compressing operation and assigns some or all of the other of said plurality of compressing/expanding devices to expanding operation, and

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a large amount of information, said compressing/expanding controller assigns all of said plurality of compressing/expanding devices to compressing operation at the time of compressing said data-to-be-input ~~inputted~~ and to expanding operation at [[the]] a time of expanding said data-to-be-output ~~outputted~~.

3. (Currently Amended) The data processing apparatus as recited in claim 2, further comprising an output discrimination portion which discriminates whether an outputting operation of said output portion is a first ~~set of~~ outputting operation or a second or subsequent ~~set of~~ outputting operation,

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, if it is discriminated by said output discrimination portion that said outputting operation of said output portion is a first ~~set-of-outputting~~ operation, said transfer controller transfers said data-to-be-output ~~outputted~~ input ~~inputted~~ from said input portion to a file memory through some of said plurality compressing/expanding devices assigned to a compressing operation and further transfers said data-to-be-output ~~outputted~~ to said output portion through ~~some-or-all~~ at least some of the other of said plurality of compressing/expanding devices assigned to the expanding operation, and if it is discriminated by said output discrimination portion that an outputting operation of said output portion is a second or subsequent ~~set-of-outputting~~ operation, said transfer controller transfers compressed data-to-be-output ~~outputted~~ stored in said file memory to said output portion through said some or all of the other of said plurality of compressing/expanding devices assigned to expanding operation, and

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a large amount of information, if it is discriminated by said output discrimination portion that said outputting operation of said output portion is a first ~~set-of-outputting~~ operation, said transfer controller transfers said data-to-be-output ~~outputted~~ that is input ~~inputted~~ from said input portion to a file memory through all of said plurality compressing/expanding devices assigned to compressing operation while transferring said data-to-be-output ~~outputted~~ to said output portion, and if it is discriminated by said output discrimination portion that said outputting operation of said output portion is a second or subsequent ~~set-of-outputting~~ operation, said transfer controller transfers compressed data-to-be-output ~~outputted~~ stored in said

file memory to said output portion through all of said plurality of compressing/expanding devices assigned to expanding operation.

4. (Currently Amended) The data processing apparatus as recited in claim 1, wherein said data-to-be-output ~~outputted~~ including a small amount of information is monochrome data and said data-to-be-output ~~outputted~~ including a large amount of information is color data, and wherein said data discrimination portion discriminates whether said data-to-be-output ~~outputted~~ is said monochrome data or said color data.

5. (Currently Amended) The data processing apparatus as recited in claim 1, wherein said data-to-be-output ~~outputted~~ including a small amount of information is binary data and said data-to-be-output ~~outputted~~ including a large amount of information is multi-valued data, and wherein said data discrimination portion discriminates whether said data-to-be-output ~~outputted~~ is said binary data or said multi-valued data.

6. (Original) The data processing apparatus as recited in claim 5, wherein said binary data includes binarized color data.

7. (Currently Amended) The data processing apparatus as recited in claim 2, wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, said compressing/expanding controller further changes

operational assignment of said plurality of compressing/expanding devices depending on an amount of information.

8. (Currently Amended) A data processing method, comprising:  
discriminating whether data-to-be-output ~~outputted~~ is data including a small amount of information or a large amount of information;

executing a compressing operation of said data-to-be-output ~~outputted~~ and expanding operation of compressed data-to-be-output ~~outputted~~ by less than all of a plurality of compressing/expanding devices operating in parallel, and thereafter executing an outputting operation of on the expanded data-to-be-output ~~outputted~~ in cases where it is discriminated that said data-to-be-output ~~outputted~~ is data including a small amount of information; and

executing the compressing operation of said data-to-be-output ~~outputted~~ while executing the outputting operation of said data-to-be-output ~~outputted~~ in cases where it is discriminated that said data-to-be-output ~~outputted~~ is data including a large amount of information.

9. (Currently Amended) The data processing method as recited in claim 8, wherein, in cases where it is discriminated that said data-to-be-output ~~outputted~~ is data including a small amount of information, some of said plurality of expanding/compressing devices are assigned to the compressing operation and some or all of the other of said plurality of the expanding/compressing devices are assigned to expanding operation, and

wherein, in cases where it is discriminated that said data-to-be-output ~~outputted~~ is data including a large amount of information, all of said plurality of expanding/compressing devices are assigned to the compressing operation at the time of compressing said a data-to-be-input ~~inputted~~ and to the expanding operation at ~~[[the]]~~ a time of expanding said data-to-be-input ~~inputted~~.

10. (Currently Amended) The data processing method as recited in claim 9, wherein it is discriminated whether said outputting operation is a first ~~set-of~~ outputting operation or a second or subsequent ~~set-of~~ outputting operation,

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, if it is discriminated that said outputting operation is a first ~~set-of~~ outputting operation, said inputted data-to-be-output ~~outputted~~ is transferred to a file memory through some of said plurality compressing/expanding devices assigned to compressing operation and then ~~outputted~~ output through some or all of the other of said plurality of compressing/expanding devices assigned to expanding operation, and if it is discriminated that said outputting operation is a second or subsequent ~~set-of~~ outputting operation, said compressed data stored in said file memory is ~~outputted~~ output through said some or all of the other of said plurality of compressing/expanding devices assigned to the expanding operation, and

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a large amount of information, if it is discriminated that said outputting operation is a first ~~set-of~~ outputting operation, ~~inputted~~ input data-to-be-output ~~outputted~~ is transferred to a file memory through all of said plurality compressing/expanding

devices assigned to compressing operation while transferring said data-to-be-output ~~outputted~~ to an output portion, and if it is discriminated that said outputting operation is a second or subsequent set of outputting operation, compressed data stored in said file memory is transferred to said output portion through all of said plurality of compressing/expanding devices assigned to expanding operation.

11. (Currently Amended) The data processing method as recited in claim 8, wherein said data-to-be-output ~~outputted~~ including a small amount of information is monochrome data and said data-to-be-output ~~outputted~~ including a large amount of information is color data, and wherein data discrimination is performed by discriminating whether said data-to-be-output ~~outputted~~ is said monochrome data or said color data.

12. (Currently Amended) The data processing method as recited in claim 8, wherein said data-to-be-output ~~outputted~~ including a small amount of information is binary data and said data-to-be-output ~~outputted~~ including a large amount of information is multi-valued data, and wherein data discrimination is performed by discriminating whether said data-to-be-output ~~outputted~~ is said binary data or said multi-valued data.

13. (Original) The data processing method as recited in claim 12, wherein said binary data includes binarized color data.

14. (Currently Amended) The data processing method as recited in claim 9, wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, operational assignment of said plurality of compressing/expanding devices is changed depending on an amount of information.

15. (Currently Amended) An image forming apparatus, comprising:

- a scanner which outputs an original image by converting into electronic data with a photoelectric transferring element;
- an input port which receives a print job from an external device including a computer and a facsimile apparatus;
- an input adjusting portion which receives a scanned image job outputted from said scanner and a print job inputted into said input port;
- a plurality of compressing/expanding devices which compress data-to-be-output ~~outputted~~ included in a job inputted from said input adjusting portion and expand compressed data-to-be-output ~~outputted~~;
- a storage which stores said compressed data-to-be-output ~~outputted~~;
- a printer which prints out data-to-be-output ~~outputted~~, said data-to-be outputted being included in said print job or said scanned image job on a sheet;
- a data discrimination portion which discriminates whether said data-to-be-output ~~outputted~~ is data including a small amount of information or a large amount of information; and
- a transfer controller,



wherein, in cases where it is discriminated by said data discrimination portion that said data-to-be-output ~~outputted~~ is data including a small amount of information, said transfer controller transfers said data-to-be-output ~~outputted~~ to said printer through less than all of said plurality of compressing/expanding devices operating in parallel, and

wherein, in cases where it is discriminated by said data discrimination portion that said data-to-be-output ~~outputted~~ is data including a large amount of information, said transfer controller transfers said data-to-be-output ~~outputted~~ to at least some of ~~all of~~ said plurality of compressing/expanding devices while transferring said data-to-be-output ~~outputted~~ to said an output portion.

16. (Currently Amended) The image forming apparatus as recited in claim 15, further comprising a compressing/expanding controller,

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, said compressing/expanding controller assigns some of said plurality of compressing/expanding devices to compressing operation and assigns some or all of the other of said plurality of compressing/expanding devices to expanding operation, and

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a large amount of information, said compressing/expanding controller assigns all of said plurality of compressing/expanding devices to compressing operation at ~~[[the]]~~ a time of compressing said a data-to-be-inputted and assigns all of said plurality of compressing/expanding devices to expanding operation at the time of expanding said data-to-be-output ~~outputted~~.

17. (Currently Amended) The image forming apparatus as recited in claim 16, further comprising an output discrimination portion which discriminates whether an outputting operation of said printer is a first set of outputting operation or a second or subsequent ~~set-of-outputting~~ operation,

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, if it is discriminated by said output discrimination portion that said outputting operation of said printer is a first ~~set-of-outputting~~ operation, said transfer controller transfers said data-to-be-output ~~outputted~~ to said storage through some of said plurality compressing/expanding devices assigned to a compressing operation and further transfers said data-to-be-output ~~outputted~~ to said printer through some or all of the other of said plurality of compressing/expanding devices assigned to expanding operation, and if it is discriminated by said output discrimination portion that said output from said printer is a second or subsequent ~~set-of-output~~, said transfer controller transfers compressed data-to-be-output ~~outputted~~ stored in said storage to said printer through said some or all of the other of said plurality of compressing/expanding devices assigned to expanding operation, and

wherein, in cases where said data-to-be-output ~~outputted~~ is data including a large amount of information, if it is discriminated by said output discrimination portion that said outputting operation of said printer is a first ~~set-of-outputting~~ operation, said transfer controller transfers said data-to-be-output ~~outputted~~ to said storage through all of said plurality compressing/expanding devices assigned to compressing operation while transferring said data-to-be-output ~~outputted~~ to said printer, and if it

is discriminated by said output discrimination portion that said outputting operation of said printer is a second or subsequent ~~set of~~ outputting operation, said transfer controller transfers compressed data-to-be-output ~~outputted~~ stored in said storage to said printer through all of said plurality of compressing/expanding devices assigned to expanding operation.

18. (Currently Amended) The image forming apparatus as recited in claim 15, wherein said data-to-be-output ~~outputted~~ including a small amount of information is monochrome data and said data-to-be-output ~~outputted~~ including a large amount of information is color data, and wherein said data discrimination portion discriminates whether said data-to-be-output ~~outputted~~ is said monochrome data or said color data.

19. (Currently Amended) The image forming apparatus as recited in claim 15, wherein said data-to-be-output ~~outputted~~ including a small amount of information is binary data and said data-to-be-output ~~outputted~~ including a large amount of information is multi-valued data, and wherein said data discrimination portion discriminates whether said data-to-be-output ~~outputted~~ is said binary data or said multi-valued data.

20. (Original) The data processing apparatus as recited in claim 19, wherein said binary data includes binarized color data.

21. (Currently Amended) The data processing apparatus as recited in claim 16, wherein, in cases where said data-to-be-output ~~outputted~~ is data including a small amount of information, said compressing/expanding controller further changes operational assignment of said plurality of compressing/expanding devices depending on an amount of information.